

arches above, and the clerestory walls are in few places less than eighteen inches out of a vertical line, and not six feet in the same direction. The foundations appear to have failed originally; but the walls have been further pressed outwards by the arched (perpendicular) roof.

The whole of the walls of nave, west end, and aisles are rotten when opened, and they stand by their mass only, or with the assistance of old houses built up against them; under such circumstances, I advise the committee not to touch column, arch, or wall, unless they are prepared to rebuild the church *de novo*.

The restoration of the surface of the columns and capitals is, I believe, the only mode of dealing with them under existing circumstances. The stucco is very thin, and not intended to give apparent uprightness to the columns, because the winding of the arches would appear much more unsightly than at present; and if the columns and arches were rebuilt perpendicularly, the walls would scarcely stand upon them.

The amount proposed to be expended in rebuilding an east wall, putting up a new roof to the aisle, new flooring and seating the whole of the church, and the removal of north and south galleries, is not to exceed 1,000*l.*—the area of the floor being more than 5,000 feet. Restoration of the church, or more properly speaking, rebuilding, is manifestly out of the question with such a purse.

The west end is really a valuable specimen of Norman work, and it was doubtless a fine church of its style in its original state; but the curtailment of half its length, and the addition of a large late perpendicular south aisle, leave an interior to be treated as a picturesque subject, rather than a model for imitation. Much of the picturesque effect is produced by the wood roof, with the principals winding a yard or an eastward or westward, which would not be considered handwork if executed by a tradesman now. I have been led to make this observation, and I trust you will excuse its being a little by the way, because I have heard so many well-meaning persons bestow extravagant approbation upon old forms and workmanship, which they would as cordially condemn under an impression that the same were modern.

The restoration of forms existing in the columns, capitals, &c., appears to be all that is necessary as a matter of art or archaeology. In case of rebuilding the church, I presume the architect who attempted to blend the forms of differing styles, and incongruities in the same style now seen, would be most unmercifully condemned; whether justly or unjustly, let the most ardent restorer of the existing church determine. The question now is, whether the columns, capitals, and arches, are to be made good to the eye (for it will be almost impossible to distinguish between the stone and the stucco), at a moderate cost, or whether for the purpose of restoring them substantially, the church shall be taken down. It is likely that the church may stand a hundred years with moderate care, and for that period, a plaster restoration seems to answer the purpose as well as stone. Any attempt at opening the exterior of the church to view, will bring it down, so that if parties are found willing to undertake the whole restoration in a proper way, rebuilding is the only course open, and in default of present means, it appears better to leave expensive restoration for the time when entire reconstruction will be unavoidable.—I am, Sir, &c., SAM'L C. FRIPP.

Bristol, Sept. 26, 1846.

INSTRUCTION TO STUDENTS AT ROYAL INSTITUTE OF ARCHITECTS.

SIR,—Would it lessen the dignity of the Royal Institute of British Architects, to promote the study of their art in the manner indicated by your correspondent of last week, as to a school of design?—I venture to think not; so address you in continuation of those remarks, the result of which would doubtless, benefit the students of that art, and, consequently, be not unwelcome to its admirers.

The Institute has a good library, which is open only three evenings in the week, when the average number of visitors is between one and two; the large lecture room is used only two nights per month. They have also a

small museum. Is there not then a quantity of available room wasted, and could not a professor be appointed here, with greater facility than where all these expensive requisites have to be procured?

The small number of students (about fourteen) pleads for an improvement of some kind in their department.—I am, Sir, &c.,

JUVENIS.

RAILWAY JOTTINGS.

THE tenders for erecting stations at Needham-market and Thurston, on the line of the Ipswich and Bury Railway, were on Tuesday week examined, and adjudged by the directors. For the erection of the Needham-market station there were three tenders: Mr. Baldiston for 3,560*l.*; Mr. Ribbans, 3,400*l.*; Mr. Revett, 3,150*l.* For Thurston: Mr. Trevethan, 3,810*l.*; and Mr. Reed, 3,753*l.* In each case the lowest tender was accepted. The stations have been commenced, and it is expected the platforms will be covered by the end of October, at which time, it is thought, the line will be ready for opening. The tunnel under Stoke Hill was completed on Saturday week, when the contractors invited about 100 of the directors and their friends to "a handsome dinner in the tunnel." The difficulty at Stowmarket "appears to be quite overcome by the use of a quantity of hurdles, faggots, &c.; and there is little doubt of the whole of that part being finished in a fortnight." The arch over the road at the Northgate, Bury, is completed. "The centering of the arch," says the *Bury Post*, "constructed, as it is, to offer no impediment to the traffic on the road below during the whole period of the erection of the bridge, has been admired by architects and builders of eminence as superior to any thing they have ever seen."—There are upwards of 3,000 labourers, it appears, engaged at work between Peterborough and Ely.—On the Berks and Hants branch of the Great Western, the arch recently erected by the contractor over the Oxford-road, near Reading, fell, on Friday, last week, with a heavy crash, into a heap of ruins. The wood-work centre, upon which the bridge was built, was erected about some days before, and though followed by a slight sinking, no apprehension of a fall was entertained, and accordingly on Thursday the entire frame-work was removed, and no indication of instability could be observed until the crash occurred. Extreme haste in construction and mixture of cement are alleged to have been the causes of the mishap.—The tunnel from Edge Hill to the North Docks, at Liverpool, has been contracted for by Mr. McCormick, as the successful competitor, at 40*l.* per yard, or about 90,000*l.* in all. There is to be a goods station in Hudson-street at the back of Byrom-street, which will be the only opening.—On Wednesday week, the Ashton, Stalybridge, and Liverpool Junction line, was privately opened through to Stalybridge, on which occasion Major Pasley, accompanied by Messrs. Brun, Lees, Watts, and Jenkins, engineers, attended to inspect the line. The first part of the contract, at the Manchester end, has been executed by Messrs. Hemmingsway and Pearson, and the remainder part by Messrs. Harding and Cropper, who have had about five out of the six miles and a half of the work. The latter gentlemen commenced on their contract about the 8th of April, 1845, and have, therefore, notwithstanding many difficulties, completed the work in something under 18 months. There are 20 bridges upon it, from Manchester to Stalybridge, exclusive of the ten-arch viaduct, which crosses the river Medlock. A great portion of the line runs across the Ashton moor, and the other part is through heavy cuttings of marl and loam. The Ashton station is a large commodious stone building. The roof across the railway is 60 feet span and 150 feet long. Several large warehouses are in course of being built at Ashton, and in those erected there are already no less than 3,000 bags of cotton belonging to the millowners in the town. The terminus at Stalybridge adjoins that of the Ashton branch of the Sheffield railway, being merely divided by a wall. The line will be opened to the public on 5th October.—From two official documents lately published in France and Belgium, it appears that notwithstanding the gifts of land and other advantages conferred by the government of

these countries on the companies which obtain the "concession," the expenses of constructing their lines are not, on the whole, less than those at which railways are now constructed in this country. Though, some years ago, the average cost of constructing English railways was about 30,000*l.* per mile, the average estimates of those lines which obtained their bills last session will not exceed 18,000*l.* per mile, which is as near as may be the average cost of construction in the case of continental railways generally. The French and Belgian lines are mainly worked under the direction and control of the governments of these countries, which may account for the fact—though, in many instances, the lines are only single, and the trains not half so numerous as in England. The average expense of working them is 48*l.* per cent. on the total receipts; while in this country, the average cost of working does not exceed 33 per cent. It is a curious fact, in the case of continental lines, that the shortest railways pay the best. It is the reverse in England. Out of every 1,000,000*l.* of capital invested in French and Belgian lines, it is calculated that shares to the extent of 600,000*l.* are held by Englishmen.—The villagers of a little town near Montreuil have refused to allow the works of the railway near that town to proceed, as it will run through their public cemetery.

With reference to the scales of charges for telegraphic messages on the South Eastern line presented in our last impression, a correspondent of the *Mining Journal* with truth, observes, that "the directors, with that grasping and mercenary feeling which has characterised their proceedings of late, more especially in a large increase in their fares, have set prices upon these telegraphic messages which will entirely prevent its use; and thus by their covetousness, defeat their own purposes and interests." Who, he asks, would pay such prices for a few words conveyance, when he can not only send a sheet of foolscap fully written by post for a penny, but actually convey himself along the line itself to a *vis-à-vis* communication with his correspondents, and return as he went, all for the amount charged for the mere transmission of a message of a few words. The charges on the continental line of railway, noted also in our last week's paper, certainly present a marked contrast to these;—a message of 20 words for 50 cents, or about 5*d.*, instead of 5*s.*, the minimum charge in both cases! The rapacity which thus overreaches even one's own self-interest, is by no means so glaring on others of our own British lines; as for instance, on the South-Western, where messages are sent the entire length of the line, 88 miles for 3*s.* if 26 words, and 1*s.* 6*d.* for every additional 20 words, up to 100, when the charge for every 20 words is further restricted to 1*s.* On the Eastern Counties even, the charges are still lower in proportion, as appears from the following particulars, presented on the authority of a correspondent of the *Chelmsford Chronicle*.—From London to Broxbourne, 19 miles, and all intermediate stations, 2*s.*; to Cambridge, 57 miles, and all the stations between Broxbourne and Cambridge, 3*s.* 6*d.*; to Brandon, 88 miles, and all stations between Cambridge and Brandon, 5*s.*; and to Yarmouth, 146 miles, 7*s.* 6*d.* From Broxbourne to Cambridge, and all the intermediate stations, 2*s.*; to Brandon, and all stations between Cambridge and Brandon, 3*s.* 6*d.* From Cambridge to Brandon, and all intermediate stations, 2*s.* If the message and answer exceeds 40 words, an additional charge of 1*s.* is made for every succeeding 10 words.

LIGHTING AND HEATING BY CARBONIC OXIDE.—A patent has been taken out, by Mr. J. Constable, of London, for a method of preparing carbonic oxide gas from anthracite, in blast furnaces, by aid of heated steam and air; passing it, for illumination, through oil of turpentine, to increase its brilliancy; and for heating purposes, mixing it with air supplied by gasometer to the burner. Materials valuable as manure are obtained from the ashes,—cyanide of potassium by washings, and ammoniacal products by aid of steam; the scarcity and high price of guano thus, as in Dr. Playfair's researches, and in the scheme for condensing sewage, leading to a fair prospect of a cheap supply of artificial equivalents.